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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/800,609

03/07/2001

John David Begin

60314-196

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7590

07/21/2005

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EXAMINER

LEE, BENJAMIN C

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/800,609

Applicant(s)

BEGIN, JOHN DAVID

Examiner

Benjamin C. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Claim Status

1. Claims 1-4 and 6-16 are pending.

Claim Rejections - 35 USC § 103

2. Claims 1-4, 6, 9-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA, pages 1-2 of Applicant's specification) in view of Weiberle et al. (EP1147929A1) as stand in the previous Office action.
3. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Weiberle et al. as stand in the previous Office action.
4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Weiberle et al. and Shimizu et al. (US Pat. No. 5,115,238) as stand in the previous Office action.
5. Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Weiberle et al. and Kato et al. (US Pat. No. 5,796,613) as stand in the previous Office action.

Response to Arguments

6. Applicant's arguments filed 2/17/05 have been fully considered but they are not persuasive.

1) The Office action rejection has complied with Graham vs. John Deere examination procedures, including the detail explanation of how the prior art references are combined to meet or render obvious every claimed limitation, and the motivation for such combination. As indicated by Applicant, motivation for combination of prior art references must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available

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to one having ordinary skill in the art, in which the latter is relied on by the Office action rejection of claims 1-4, 6, 9-11 and 13, for example, as is apparent from the Office action rejection, which is based on the ground that the primary teaching of Applicant's Admitted Prior Art (AAPA) teaches the claimed invention of propagating a previous position to a current position in a vehicle navigation system using pitch, heading, speed, roll and their respective changes in information, except specifically determining the pitch from longitudinal and vertical acceleration information but instead uses a separate gyro (in addition to the use of accelerometers) to determine pitch and roll, while Weiberle et al. teaches the known determination of pitch and roll information using longitudinal, vertical and lateral acceleration without the use of information from a gyro. The Office action rejection further stated that in view of these two teachings, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention since vehicle pitch and roll information for use in position propagation determination in a system/method as taught by AAPA can also be determined from the longitudinal, vertical and lateral acceleration information from the accelerometer as taught by Weiberle et al., the gyro for determining vehicle pitch and roll information can be eliminated to reduce the number of sensor elements (i.e. by eliminating the use or need of the gyro) and (associated) connections and thus associated cost and maintenance efforts. The modification from AAPA of using the (multi-axis) accelerometer (a sensor element) and a gyro (another sensor element) to using only the accelerometer of the combined teaching of AAPA and Weiberle et al., which changes from 2 sensor elements to only one sensor element (when using a multi-axis type accelerometer), clearly constitutes a case of reduction of the number of sensor elements, and thus their associated required connections, and associated cost and maintenance

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efforts, since all additional hardware (in this case the additional sensor element and associated connections) requires the associated additional cost, and maintenance over time to keep it operating properly. Therefore, the Office action has in fact already sufficiently addressed all of the issues raised by Applicant in the Remarks, and Applicant's arguments are as a result not deemed persuasive.

2) Applicant's remaining arguments directed to the remaining claims are all based on the above already addressed issues by stating that the additional prior art used in the remaining prior art combinations also based on AAPA and Weiberle et al. do not overcome the alleged deficiencies stated above. Since the above allegations have been rebutted, Applicant's arguments regarding the remaining claims are also not deemed persuasive.

3) In conclusion, Applicant's arguments are not deemed persuasive, and the Office action rejection is maintained.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963. The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Benjamin C. Lee
Primary Examiner
Art Unit 2632

B.L.